

70 RF 1525

EG&G ROCKY FLATS

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EN, J.H.		
TZKE, J.C.		
LINGAME, A.H.		
IS, J.G.		
IBER, D.W.		
RIS, L.R.		
NCIS, G.E.		
ODWIN, R.		
LY, T.J.		
AKER, E. H.		
SH, J.M.	X	
Y, W.A.		
ESTIC, J.R.		
INLEY, K.B.	X	
LEN, J.B.		
NELL, R.F.		
TER, G.L.		
DES, J.L.		
ER, V.L.		
ORD, T.H.		
YNON, W.M.		
LEUVEN, D.B.		
NER, B.P.		
KG, E.B.		
SHER, D.H.		
NIVAL, G.J.		
MAN, L.K.		
ERT, J.L.		
EMAN, R.B.		
AMAN, R.L.		
G, D.M.		
ENBERG, G.E.		
ION, E.R.		
BY, R.L.		
NER, H.L.		
ISOUEZ, R.N.		
SENIGALDO	X	X
NOT	X	X
TUS	X	X
RES. CONTROL	X	X
TRACT ADMIN.		

CLASSIFICATION:

CLASSIFIED	X	X
IDENTIAL		
ET		

AUTHORIZED CLASSIFIER
SIGNATURE

1990

PLY TO LTR NO.

APPROVALS:
SM RM
& TYPIST INITIALS
SYDF

April 10, 1990

90-RF-1525

Robert M. Nelson, Jr.
Manager
DOE, RFO

SUBMITTAL OF FINAL PHASE II RI/FS WORK PLAN FOR OPERABLE UNIT NO. 2

Transmitted herewith are two copies of the Final Phase II RI/FS Work Plan for Operable Unit No 2. This plan incorporates EPA and CDH comments on the December 1989 draft plan. We are preparing a written response to these comments that identifies how each comment was addressed in the plan, or if not addressed in the plan, the reason for the omission. In general, the plan now provides a much more detailed description of the ground water and surface water chemistry based on review of all data available (not simply second quarter 1989), recent interpretation of bedrock sandstone occurrence, and discussion of additional bedrock wells to be installed to preliminarily characterize the geochemistry and lithology of shallow sandstones. Modifications to the monitor and borehole locations have been made pursuant to our meeting on March 13, 1990, and additional wells have been proposed north of the Mound Area to evaluate contamination in the vicinity of well 35-86. The surface water chemistry discussion includes an assessment of parameters above ARAR (Applicable or Relevant and Appropriate Requirements) together with a complete data summary to this effect. This has been provided because of EPA's and CDH's recent concern over contaminated surface water and the need to perform an Interim Measures/Interim Remedial Action (IM/IRA). We have also included a brief discussion of an evaporative concentration conceptual model that may explain high TDS, metals, and uranium in ground water at the 881 Hillside Area and 903 Pad, Mound, and East Trenches Areas. This model does not alter the borehole and well placement strategy in the Phase II plan, and its veracity will be tested in the background characterization study.

The final RI Plan for Operable Unit No. 2 will be implemented in steps in order to facilitate evaluation of the need for an IM/IRA pertaining to ground water before issuance of the final RCRA Facility Investigation/Remedial Investigation (RFI/RI). The objective of the IM/IRA would be mitigation of contaminant migration in the alluvium and hydraulically interconnected bedrock sandstone (uppermost sandstone). The draft plan called for installation of many alluvial wells located to define the extent of contaminant plumes emanating from Operable Unit No. 2. The final plan also calls for the installation of these wells (with some location changes per EPA and CDH comments) but also includes additional drilling and monitor well installation to better characterize the extent and ground water chemistry of the uppermost sandstone in this area. These wells will be installed, developed and sampled as the first step of the investigation. Source characterization boreholes and wells will be installed subsequently as the second step of the investigation.

ADMIN RECORD

REVIEWED FOR CLASSIFICATION
By W. J. Gaffney
Date 12/92

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R. M. Nelson
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During drilling of the plume characterization alluvial wells, the boreholes will be advanced five (5) feet into bedrock to verify the presence or absence of the uppermost sandstone. If sandstone is found to be present, the well will be completed as a bedrock well and an alluvial well will be installed adjacent to this well. If sandstone is not encountered, the well will be completed as an alluvial well. For planning purposes, those alluvial wells located above the predicted location of the uppermost sandstone are assumed to have a paired bedrock well (68 alluvial wells and an additional 18 bedrock wells). Based on the use of three drill rigs, these wells can be installed, developed and sampled in 35 weeks. An additional 6 weeks will be required for all analytical data to be received (non-validated), and another six weeks is proposed to evaluate the data in preparation for discussions with EPA and CDH regarding an IM/IRA. If an IM/IRA is pursued, a draft proposed IM/IRA Plan that incorporates an assessment of the plume characterization data will be submitted to EPA and CDH within 2 months. The remainder of the schedule for the IM/IRA planning and implementation and RI reporting is based on the draft Interagency Agreement (IAG). The milestone schedule is attached. A drilling start date of July 15, 1990 has been assumed. A start date of July 15 allows time to design and construct an adequate decontamination facility that will minimize health, safety and environmental impacts of decontamination operations. We are also expediting revisions of Health and Safety and Quality Assurance Plans and Standard Operating Procedures in order to meet this schedule. The IAG milestone date for these deliverables is July 27, 1990.

Please call Tom Greengard at X7121 when you have the transmittal letters ready for EPA and CDH. We will deliver the plan to the agencies after we receive the transmittal letters. The plan is due to the agencies April 12, 1990.



J. M. Kerish
Associate General Manager

TCG:sf

Orig. and 1 cc - R. M. Nelson, Jr.

Attachment:
As Stated

MILESTONES
OPERABLE UNIT NO. 2 IM/IRA

ACTIVITY

COMPLETION DATE

Field Investigation (Plume)
Data Receipt (Plume)
Data Evaluation (Plume)
Draft Proposed IM/IRA Plan
Field Investigation (Sources)
Data Receipt (Sources)
Proposed IM/IRA Plan
Final IM/IRA Plan
Draft Report (Plume and Sources)

July 22, 1991
September 2, 1991
October 14, 1991
January 6, 1992
January 13, 1992
February 24, 1992
March 2, 1992
April 27, 1992
August 21, 1992